IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	**Boudouris et al**
Application No.:	**09/990109**
Filed:	**November 21, 2001**
For:	**Magnetic Substrates, Composition and Method for Making the Same**
Group Art Unit:	**1733**

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Docket No.: M112.2-10064-US01

DECLARATION UNDER 37 C.F.R. §1.132

I, Thomas H. Quinn, attest and say as follows:

1. I graduated from Macalester College in St. Paul, MN with a Bachelor's Degree in Chemistry.

2. I was employed by the H.B. Fuller Co., a global manufacturer of adhesives and coatings, from 1973, when I was hired as an Analytical Chemist. That same year I transferred to the Hot Melt Research & Development Laboratory as a product development chemist. In that role, I developed the company's first hot melt pressure sensitive adhesives, conceived and helped in the development of the first co-extruded pillows, eliminating the need for shipping tacky products in silicone lined boxes, received a patent in 1976 for the invention of styrene-ethylene/butylene-stryene (SEBS) block copolymer based pressure sensitive adhesives used as attachment adhesives for feminine hygiene products. These products are still in use today.

In 1976, I was promoted to Department Head of the Hot Melt Research & Development Laboratory. In that role, I assumed responsibility for leadership in the development of H.B. Fuller's hot melt technology, lead technical efforts for the integration of company acquisitions, participated in planning and start-up for H.B. Fuller's first modern hot melt manufacturing facilities and was a leader for technology transfer to H.B. Fuller's international locations, particularly Europe.

In 1985, I became the first "Technical Systems Manager" for the development of computer systems to be used for the Research & Development facility located in St. Paul, MN. In this role, I helped develop world wide web access for the laboratory, and developed databases to store information for raw materials used in H.B. Fuller's adhesives and coatings, including hot melt, water base and reactive composition raw materials.

In 1995, I returned to the hot melt laboratory where I developed and managed a hot melt technical intranet, lead the transfer of technology for international hot melt laboratories, held a leadership role in a joint development product with Dow Chemical Company to develop single-site catalyst polyolefin polymers for packaging adhesives, and received the most prestigious technical award given to H.B. Fuller Research & Development personnel (Annual Technical Achievement Award, 1998) for the development of polyolefin base hot melt adhesives for packaging.

3. In 2002, I left H.B. Fuller Co. and founded Adherent Laboratories. Adherent Laboratories serves all segments of the adhesives industry including adhesive users, adhesive distributors and manufacturers, and raw material suppliers, in the areas of adhesive testing and product support.

4. I am an inventor on many issued U.S. Patents relating to hot melt adhesives and articles formed having hot melt adhesives thereon including US 6,833,404; US 6,582,829; US 6,319,979; US 6,107,430; US 4,136,699. I am also an inventor on many currently pending U.S. Patent Applications.

5. Based on my experience, I am qualified as skilled in the hot melt adhesive and coating art, as well as in the hot melt application equipment art.

6. Adherent Laboratories has provided consulting to MagnetNotes, Inc. on several occasions: (1) 2002 in order to find a more heat resistant binder system; (2) 2004 in order to research prior art for graffiti removal systems; (4) 2005 for reviewing U.S. Patent No. 6,387,485 to Bielek et al.; and (4) 2006 for the current matter. Our last invoice to MagnetNotes, Inc. was in November 2004 for $2,500. They constitute a very minor portion of our business.

7. I provide this Declaration in support of the patentability of the subject matter disclosed and claimed in the patent application which is referenced above.

8. I have read and understand U.S. Patent No.6,881,450 to Texier filed February 23, 2001, which discloses a method of magnetically linking a ferromagnetic object to a partially magnetized coating material made by applying a coating to a surface of a continuously-moving medium.

9. I found no suggestion from studying Texier, to employ an extruder or a slot-die head in applying the compositions disclosed therein. The patent discusses two application methods (col. 4, lines 33-46): (1) nozzle, which refers to a tube or orifice that comes to a point, and (2) a roller type machine, which refers to a wheel which carries a composition from a reservoir to a substrate, for example a machine including a Nordson 3960 Multiscan®, and connected to the nozzle type or roller type machine via 2.40 meter long automatic heating hoses to automatic guns sold by the same company under the reference H20. The Nordson 3960 Multiscan® pumps the composition to the nozzle or to the roller type machine. The roller type machine appears to be preferred as it is the one used in all of the diagrams and in the only example disclosed therein.

10. A nozzle or a roller type machine are not equivalent to a slot die head, and a 3960 Multiscan® is not equivalent to an extruder, nor does a nozzle or roller type machine in combination with a 3960 Multiscan®, suggest to someone in the art to employ a slot die head with an extruder.

11. An extruder may be employed in combination with a variety of different types of application heads. Neither an extruder nor a slot die, much less any application head in combination with an extruder are suggested by Texier.

12. I have also reviewed the claims of U.S. Patent Application Serial No. 09/990,109, as they currently stand. Claim 1 is the following:

Claim 1

A process of forming a magnetic assembly having at least one magnetic layer having dimensions of thickness, width and length, and at least one printable substrate layer having dimensions of thickness, width and length, comprising the steps of:
a) providing a magnetic hot melt composition at an elevated temperature ***with an extruder***, said magnetic hot melt composition comprising about 75 wt-% to about 95 wt-% of at least one magnetic material and about 5 wt-% to about 25 wt-% of at least one thermoplastic polymer; and
b) directly applying said magnetic hot melt composition ***with a slot die head*** at an elevated temperature when it is pliable to a printable substrate layer, the printable substrate layer formed of paper, paper products or paste board.

As stated in paragraphs 10 and 11, above, Texier discloses a nozzle, an orifice which comes to a point, or a roller type machine which do not suggest a slot die head, and a 3960 Multiscan® gear pump hot melt applicator which does not suggest an extruder. Consequently, Texier fails to suggest to someone of ordinary skill to replace the nozzle or roller type machine and the 3960 Multiscan® gear pump applicator, with an extruder and a slot die.

13. It is further my opinion that using a slot die coating method as recited in claim 1 of the present application, is advantageous for several reasons: (1) it offers a method of better control of the application of the magnetic hot melt composition; (2) less thermal degradation of the magnetic hot melt composition; and (3) less volatiles than a roll applicator.

14. I have also studied Texier, specifically column 3, lines 24-29, wherein it is stated:

> Advantageously, the amount of electromagnetic filler that is used is the maximum that can be accepted by the binder, for example six units by weight of ferromagnetic powder for two units by weight of binder. For examples 200 grams (g) to 850 g of iron oxide can be deposited per square meter (m^2) of card, e.g. 800 g/m^2.

Six units by weight of ferromagnetic powder to two units by weight of binder converts to a ferromagnetic powder loading of 75% by weight with 25% by weight polymer. This is the only example Texier provides for filler/binder ratios.

From this I would conclude the Texier only teaches by example a 75% filler loading.

15. I have also reviewed the claims of U.S. Patent Application Serial No. 09/990,109, as they currently stand.

Specifically, claims 81-85 are the following:

Claim 81

The method of claim 1 wherein said magnetic hot melt composition comprises about 85 wt-% to about 95 wt-% of at least one magnetic material and about 5 wt-% to about 15 wt-% of at least one thermoplastic polymer.

Claim 82

A process of forming a magnetic assembly having at least one magnetic layer having dimensions of thickness, width and length, and at least one printable substrate layer having dimensions of thickness, width and length, comprising the steps of:
a) providing a magnetic hot melt composition at an elevated temperature, said magnetic hot melt composition comprising about ***80 wt-% to about 95 wt-% of at least one magnetic material*** and about 5 wt-% to about 20 wt-% of at least one thermoplastic polymer; and
b) directly applying said magnetic hot melt composition at an elevated temperature when it is pliable to a printable substrate layer, the printable substrate layer formed of paper, paper products or paste board.

Claim 83

The process of claim 82 wherein said magnetic hot melt composition comprises about ***85 wt-% to about 95 wt-%*** of at least one magnetic material and about 5 wt-% to about 15 wt-% of at least one thermoplastic polymer.

Claim 84

A process of forming a magnetic assembly having at least one magnetic layer having dimensions of thickness, width and length, and at least one printable substrate layer having dimensions of thickness, width and length, comprising the steps of:

a) providing a magnetic hot melt composition at an elevated temperature with an extruder, said magnetic hot melt composition comprising about ***80 wt-% to about 95 wt-% of at least one magnetic material*** and about 5 wt-% to about 20 wt-% of at least one thermoplastic polymer; and

b) directly applying said magnetic hot melt composition at an elevated temperature with a slot die head when it is pliable to a printable substrate layer, the printable substrate layer formed of paper, paper products or paste board.

Claim 85

The process of claim 84 wherein said magnetic hot melt composition comprises about ***85 wt-% to about 95 wt-% of at least one magnetic material*** and about 5 wt-% to about 15 wt-% of at least one thermoplastic polymer.

16. As the maximum amount of filler suggested by Texier is 6 units/2 units of binder or 75%, Texier also fails to suggest the amount of magnetic material, i.e. about 80% to about 95% and about 85% to about 95%, as recited in claims 81-85 .

All statements made herein of my own knowledge are true; all statements made on the information and belief are believed to be true; and all the foregoing statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment or both, under § 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application and any registration resulting therefrom.

Date: 5-23-06

Signed: Thomas Quinn

Thomas H. Quinn

Title President